



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,265	06/25/2003	Peter T. McCarthy	NATURES.024A	3385

20995 7590 11/03/2004

KNOBBE MARTENS OLSON & BEAR LLP
2040 MAIN STREET
FOURTEENTH FLOOR
IRVINE, CA 92614

EXAMINER

SWIATEK, ROBERT P

ART UNIT	PAPER NUMBER
----------	--------------

3643

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/606,265

Applicant(s)

MCCARTHY, PETER T.

Examiner

Robert P. Swiatek

Art Unit

3643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10-17-03; 12-1-03.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Axelson (US 2,846,165: Ref. 9 on Information Disclosure Statement). The Axelson patent discloses a method of providing an airfoil 11 in the form of an aircraft wing and a vortex generator 13 having a cambered longitudinal cross section (see column 4, lines 8-11, of Axelson). By suitable rotation of the vortex generator 13, a region of low pressure can be created inboard of the generator and above the surface of airfoil 11 (note column 3, lines 63-66, of Axelson).

Claims 2, 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Axelson. The patent to Axelson depicts a tip droop or vortex generator 15 extending downwardly adjacent the tip of an aircraft wing 11. The vortex generator has a cambered shape, as noted in column 4, lines 8-11, of Axelson. Manipulation of the tip droop 15 of Axelson by pivoting it about an axis X—X creates a region of high pressure inboard of the tip droop and adjacent the lower surface of the wing 11.

Claims 1, 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Heal (US 2,418,301). The Heal reference discloses a vortex generator in the form of a pivotable wing tip 21. Since the wing tip 21 is an extension of the wing 20, it's considered to have an inwardly-

Art Unit: 3643

directed camber when in its vertical position, resulting in the creation of a region of reduced pressure between the tip and the aircraft fuselage. The lower end portion of tip 21 is deemed to constitute the region adjacent the shaft 22.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In lines 4, 5, it is unclear as to which of the two previously recited surfaces "said surface" (two instances) refers.

Claims 1, 3 are objected to because of the following informalities: In claim 1, line 5, the first occurrence of "and" should be changed to -an-; in claim 3, line 5, "low" should be changed to -lower- and -surface- should be inserted after "pressure." Appropriate correction is required.

The disclosure is objected to because of the following informalities: On page 7, lines 6, 7, 12, each occurrence of "136" should be changed to -134-.

Appropriate correction is required.

The abstract of the disclosure is objected to because in line 1, "are disclosed" should be deleted. Correction is required. See MPEP § 608.01(b).

On the Information Disclosure Statement, the document number corresponding to reference #2 should be checked as the name "Etrich" is not associated with the document listed.

The patents to Brix (US 6,345,790 B1) and Stuff et al. (US 6,422,518 B1) have been cited to provide additional examples of aircraft winglets.

RPS: 0703/308-2700
27 October 2004

Robert P. Swiatek
ROBERT P. SWIATEK
PRIMARY EXAMINER
ART UNIT ~~333~~ 3643